

**INDIANA DEPARTMENT OF TRANSPORTATION
OFFICE OF MATERIALS MANAGEMENT**

**VERIFYING SOIL TEST MOLDS
ITM No. 914-13T**

1.0 SCOPE.

- 1.1** This test method covers the procedures for verifying the critical dimensions of 4 in. and 6 in. molds used in AASHTO T 99, AASHTO T 180, and AASHTO T 272.
- 1.2** This ITM may involve hazardous materials, operations, and equipment and may not address all of the safety problems associated with the use of the test method. The user of the ITM is responsible for establishing appropriate safety and health practices and to determining the applicability of regulatory limitations prior to use.

2.0 REFERENCES.

2.1 AASHTO Standards.

- T 99 Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop
- T 134 Moisture-Density Relations of Soil-Cement Mixtures
- T 180 Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop

3.0 APPARATUS.

- 3.1** Calipers, readable to 0.001 in.
- 3.2** Feeler gauge, 0.005 in.
- 3.3** Straight edge, 4 in. long

4.0 TERMINOLOGY. Definitions for terms and abbreviations shall be in accordance with the Department's Standard Specifications, Section 101.

5.0 SIGNIFICANCE AND USE. This ITM is used to verify the critical dimensions of 4 in. and 6 in. soil test molds.

6.0 PROCEDURE.

- 6.1** Measure the inside diameter of the mold with the calipers to the nearest 0.001 in. Rotate the mold 90° and measure the inside diameter again. Record the average.
- 6.2** Measure the height of the mold with the calipers to the nearest 0.001 in. Rotate the mold 180° and measure the height again. Record the average.
- 6.3** Place the straightedge firmly on the base plate of the mold. Attempt to pass the feeler gauge between the base and the straightedge. The base plate is considered plane if the gauge does not pass under the straight edge.

7.0 TOLERANCES.

<u>Mold</u>	<u>Internal Diameter</u>	<u>Internal Height</u>
4 in	4.000 ± 0.016 in.	4.584 ± 0.005 in.
6 in	6.000 ± 0.026 in.	4.584 ± 0.005 in.

SOIL TEST MOLDS VERIFICATION

Equipment:

Calipers: _____

Feeler Gauge: _____

4 in. Molds			
Mold No.	Is Base Plane? (Y/N)	Internal Height	Internal Diameter

6 in. Molds			
Mold No.	Is Base Plane? (Y/N)	Internal Height	Internal Diameter

Do measurements comply with requirements of AASHTO T 99, T 180, or T 272? (Y/N) _____

Remarks: _____

Verified by: _____

Date: _____

Next Due Date: _____